



Periodic Review / Retain Regulation Agency Background Document

Agency name	State Air Pollution Control Board
Virginia Administrative Code (VAC) citation	9VAC5-510
Regulation title	Nonmetallic Mineral Processing General Permit
Document preparation date	November 7, 2011

This form is used when the agency has done a periodic review of a regulation and plans to retain the regulation without change. This information is required pursuant to Executive Orders 14 (2010) and 58 (1999).

Legal basis

Please identify the state and/or federal legal authority for the regulation, including (1) the most relevant law and/or regulation, and (2) promulgating entity, i.e., agency, board, or person.

Section 10.1-1308 of the Virginia Air Pollution Control Law (Title 10.1, Chapter 13 of the Code of Virginia) authorizes the State Air Pollution Control Board to promulgate regulations abating, controlling and prohibiting air pollution in order to protect public health and welfare.

Promulgating Entity

The promulgating entity for this regulation is the State Air Pollution Control Board.

Federal Requirements

Section 110(a) of the federal Clean Air Act mandates that each state adopt and submit to EPA a plan which provides for the implementation, maintenance, and enforcement of each primary and secondary air quality standard within each air quality control region in the state. The plan shall include provisions to accomplish, among other tasks, the following:

1. Establish enforceable emission limitations and other control measures as necessary to comply with the provisions of the Act, including economic incentives such as fees, marketable permits, and auctions of emissions rights;
2. Establish schedules for compliance;

3. Prohibit emissions which would contribute to nonattainment of the standards or interference with maintenance of the standards by any state; and
4. Require sources of air pollution to install, maintain, and replace monitoring equipment as necessary and to report periodically on emissions-related data.

Section 110(j) specifies that, as a condition for issuance of any permit required under this title, the owner or operator of each new or modified stationary source which is required to obtain such a permit must show to the satisfaction of the permitting authority that the technological system of continuous emission reduction which is proposed will enable the source to comply with the standards of performance which are to apply to the source and that the construction or modification and operation of the source will be in compliance with all other requirements of the Act.

40 CFR Part 51 sets out requirements for the preparation, adoption, and submittal of state implementation plans. These requirements mandate that any such plan shall include several provisions, including those summarized below.

Subpart G (Control Strategy) specifies the description of control measures and schedules for implementation, the description of emissions reductions estimates sufficient to attain and maintain the standards, time periods for demonstrations of the control strategy's adequacy, an emissions inventory, an air quality data summary, data availability, special requirements for lead emissions, stack height provisions, and intermittent control systems.

Subpart I (Review of New Sources and Modifications) specifies legally enforceable procedures, public availability of information on sources, identification of responsible agency, administrative procedures, stack height procedures, permit requirements, and requirements for prevention of significant deterioration of air quality.

Subpart K (Source Surveillance) specifies procedures for emissions reports and recordkeeping, procedures for testing, inspection, enforcement, and complaints, transportation control measures, and procedures for continuous emissions monitoring.

Subpart L (Legal Authority) specifies that the state implementation plan must show that the state has legal authority to implement the plans, including the authority to:

1. Adopt emission standards and limitations and any other measures necessary for the attainment and maintenance of the national ambient air quality standards;
2. Enforce applicable laws, regulations, and standards, and seek injunctive relief;
3. Abate pollutant emissions on an emergency basis to prevent substantial endangerment to the health of persons;
4. Prevent construction, modification, or operation of a facility, building, structure, or installation, or combination thereof, which directly or indirectly results or may result in emissions of any air pollutant at any location which will prevent the attainment or maintenance of a national standard;
5. Obtain information necessary to determine whether air pollution sources are in compliance with applicable laws, regulations, and standards, including authority to require recordkeeping and to make inspections and conduct tests of air pollution sources;
6. Require owners or operators of stationary sources to install, maintain, and use emission monitoring devices and to make periodic reports to the state on the nature and amounts of emissions from such stationary sources; and

7. Make emissions data available to the public as reported and as correlated with any applicable emission standards or limitations.

Section 51.231 under Subpart L requires the identification of legal authority: (i) the provisions of law or regulation which the state determines provide the authorities required under this section must be specifically identified, and copies of such laws or regulations must be submitted with the plan; and (ii) the plan must show that the legal authorities specified in this subpart are available to the state at the time of submission of the plan.

Subpart N (Compliance Schedules) specifies legally enforceable compliance schedules, final compliance schedule dates, and conditions for extensions beyond one year.

Section 111 of the Act requires that EPA develop standards of performance for new stationary sources (that is, new source performance standards, or NSPSs). Section 111(c)(1) provides that each state may develop and submit to EPA a procedure for implementing and enforcing the NSPSs. If EPA finds the state procedure adequate, the state is delegated the authority to implement and enforce the NSPSs. The Standards of Performance for New Stationary Sources are found in 40 CFR Part 60. NSPSs have been established for over 60 sources; Part 60 also contains provisions regarding notification and recordkeeping, performance tests, availability of information, state authority, compliance with standards and maintenance requirements, circumvention, monitoring requirements, modifications, reconstruction, and general control device requirements, as well as numerous test methods and performance specifications.

State Requirements

Code of Virginia § 10.1-1300 defines pollution as "the presence in the outdoor atmosphere of one or more substances which are or may be harmful or injurious to human health, welfare or safety, to animal or plant life, or to property, or which unreasonably interfere with the enjoyment by the people of life or property." Excess emissions of particulate matter from nonmetallic mineral processing facilities are harmful to human health and can significantly interfere with the people's enjoyment of life and property.

Code of Virginia § 10.1-1307 A provides that the board may, among other activities, develop a comprehensive program for the study, abatement, and control of all sources of air pollution in the Commonwealth.

Code of Virginia § 10.1-1308 provides that the board shall have the power to promulgate regulations abating, controlling, and prohibiting air pollution throughout or in any part of the Commonwealth in accordance with the provisions of the Administrative Process Act.

Alternatives

Please describe all viable alternatives for achieving the purpose of the existing regulation that have been considered as part of the periodic review process. Include an explanation of why such alternatives were rejected and why this regulation is the least burdensome alternative available for achieving the purpose of the regulation.

Alternatives for achieving the purpose of the regulation have been considered by the department. The department has determined that the retention of the regulation (the first alternative) is appropriate, as it is the least burdensome and least intrusive alternative that fully meets statutory requirements and the purpose of the regulation. The alternatives considered by the department, along with the reasoning by which the department has rejected any of the alternatives considered, are discussed below.

1. Retain the regulation without amendment. This option is being selected because the current regulation provides the least onerous means of complying with the minimum requirements of the legal mandates.

2. Make alternative regulatory changes to those required by the provisions of the legally binding state and federal mandates, and associated regulations and policies. This option was not selected because it could result in the imposition of requirements that place unreasonable hardships on the regulated community without justifiable benefits to public health and welfare.

3. Repeal the regulation or amend it to satisfy the provisions of legally binding state and federal mandates. This option was not selected because the regulation is effective in meeting its goals and already satisfies those mandates.

Public comment

Please summarize all comments received during the public comment period following the publication of the Notice of Periodic Review, and provide the agency response. Please indicate if an informal advisory group was formed for purposes of assisting in the periodic review.

Commenter	Comment	Agency response
Appalachian Power/American Electric Power	We recommend that the agency maintain the current General Permit requirements for the sources that are currently covered by the general permit and have not constructed or modified the source after 4/28/09 (the date of the revision to Subpart OOO of 40 CFR Part 60). APCO recommends the agency develop a separate general permit to consider the new NSPS requirements. While granting coverage under the general permit program for modifications to existing facilities or affected sources, the date of the modification is important as to the applicable rule that covers that modification. Modifications made after a revision to Subpart OOO is proposed will have to meet the requirements of the new rule while the other affected unmodified sources would need to meet the applicable rule at the time of construction.	We appreciate the commenter's concerns. The department's air permitting staff is currently evaluating the issue of how to best address the NSPS.

An informal advisory group was not formed to assist with conducting this review.

Effectiveness

Please indicate whether the regulation meets the criteria set out in Executive Order 14 (2010), e.g., is necessary for the protection of public health, safety, and welfare, and is clearly written and easily understandable.

The regulation is necessary for the protection of public health and welfare, as it is needed to meet the primary goals of the federal Clean Air Act: the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS) and the prevention of significant deterioration (PSD) of air quality in areas cleaner than the NAAQS.

The NAAQS, developed and promulgated by the U.S. Environmental Protection Agency (EPA), establish the maximum limits of pollutants that are permitted in the outside ambient air in order to protect public health and welfare. EPA requires that each state submit a plan (called a State Implementation Plan or SIP), including any laws and regulations necessary to enforce the plan, that shows how the air pollution concentrations will be reduced to levels at or below these standards (attainment). Once the pollution levels are within the standards, the SIP must also demonstrate how the state will maintain the air pollution concentrations at the reduced levels (maintenance).

A SIP is the key to the state's air quality programs. The Clean Air Act is specific concerning the elements required for an acceptable SIP. If a state does not prepare such a plan, or EPA does not approve a submitted plan, then EPA itself is empowered to take the necessary actions to attain and maintain the air quality standards--that is, it would have to promulgate and implement an air quality plan for that state. EPA is also, by law, required to impose sanctions in cases where there is no approved plan or the plan is not being implemented, the sanctions consisting of loss of federal funds for highways and other projects and/or more restrictive requirements for new industry. Generally, the plan is revised, as needed, based upon changes in the federal Clean Air Act and its requirements.

The basic approach to developing a SIP is to examine air quality across the state, delineate areas where air quality needs improvement, determine the degree of improvement necessary, inventory the sources contributing to the problem, develop a control strategy to reduce emissions from contributing sources enough to bring about attainment of the air quality standards, implement the strategy, and take the steps necessary to ensure that the air quality standards are not violated in the future.

The heart of the SIP is the control strategy. The control strategy describes the emission reduction measures to be used by the state to attain and maintain the air quality standards. There are three basic types of measures: stationary source control measures, mobile source control measures, and transportation source control measures. Stationary source control measures are directed at limiting emissions primarily from commercial/industrial facilities and operations and include emission limits, control technology requirements, preconstruction permit programs for new industry and expansions, and source-specific control requirements. Stationary source control measures also include area source control measures which are directed at small businesses and consumer activities. Mobile source control measures are directed at tailpipe and other emissions primarily from motor vehicles and include Federal Motor Vehicle Emission Standards, fuel volatility limits, and inspection and maintenance programs. Transportation source control measures limit the location and use of motor vehicles and include carpools, special bus lanes, and rapid transit systems.

Federal guidance on states' approaches to the inclusion of control measures in the SIP has varied considerably over the years, ranging from very general in the early years of the Act to very specific in more recent years. Many regulatory requirements were adopted in the 1970s when no detailed guidance existed. The legally binding federal mandate for these regulations is general, not specific, consisting of the Act's broad-based directive to states to attain and maintain the air quality standards. However, in recent years, the Act, along with EPA regulations and policy, has become much more specific, thereby removing much of the states' discretion to craft their own air quality control programs.

Generally, a SIP is revised, as needed, based upon changes in air quality or statutory requirements. For the most part the SIP has worked, and the standards have been attained for most pollutants in most areas. Therefore, these specific SIP provisions, including implementation of this regulation, are necessary for the protection of public health and welfare.

The new source performance standards, like the SIP requirements for criteria pollutants, are also necessary for the protection of public health and welfare. They control pollution emitted by specific source types, thereby specifically addressing a wide range of pollutants with potentially serious health and welfare effects.

For the most part, Chapter 510 simply embodies regulatory provisions found elsewhere in the air regulatory program. In particular, Chapter 510 is intended to implement Article 14 (Sand and Gravel Processing Operations and Stone Quarrying and Processing Operations) of 9VAC5-40 via the state operating permit program and Article 5 (Environmental Protection Agency Standards of Performance for New Stationary Sources) of 9VAC5-50 via the minor new source review (NSR) program. In particular, Article 5 incorporates by reference the federal standard, Subpart OOO of 40 CFR Part 60, Nonmetallic Mineral Processing Plants.

Although the general permit derives most of its terms, conditions and standards from Article 14 via the state operating permit program (for existing sources) and Article 5 via the minor NSR program (for new or modified sources), its primary benefit to the regulated community is as an alternative to a conventional permit under the minor NSR program. The minor NSR program is the enabling federal requirement for the general permit as it applies to new or modified sources.

Under the minor NSR program, terms, conditions and standards are established on a case-by-case basis and are required to be equivalent to Best Available Control Technology (BACT). In the permitting process BACT is usually determined through an extensive analysis and negotiation process between the agency and the applicant. At a minimum, BACT cannot be less stringent than any applicable federal new source performance standard (NSPS). In general, BACT for a given source type is not a constant over a period of time. A BACT analysis for a particular industrial process conducted three years from now would not necessarily yield the same results as a BACT analysis conducted today. The later analysis could not yield a less stringent BACT determination but it could yield a more stringent one.

The regulation has been effective in protecting public health and welfare with the least possible cost and intrusiveness to the citizens and businesses of the Commonwealth, ensuring that owners comply with air pollution emission limits and control technology requirements in order to control levels of particulate matter emissions being emitted into the ambient air, and prohibiting emissions that would contribute to nonattainment of the national air quality standards or interference with maintenance of those standards. The mechanism of the general permit enables sources to achieve these public health and welfare protections in the most cost-effective and efficient manner possible.

The department has determined that the regulation is clearly written and easily understandable by the individuals and entities affected. It is written so as to permit only one reasonable interpretation, is written to adequately identify the affected entity, and, insofar as possible, is written in non-technical language.

Small business impact

In order to minimize the economic impact of regulations on small business, please include, pursuant to § 2.2-4007.1 E and F, a discussion of the agency's consideration of: (1) the continued need for the regulation; (2) the complexity of the regulation; (3) the extent to which the regulation overlaps, duplicates, or conflicts with federal or state law or regulation; and (4) the length of time since the regulation has been evaluated or the degree to which technology, economic conditions, or other factors have changed in the area affected by the regulation. Also, include a discussion of the agency's determination whether the regulation should be amended or repealed, consistent with the stated objectives of applicable law, to minimize the economic impact of regulations on small businesses.

This regulation continues to be needed. It provides sources with the most cost-effective means of fulfilling ongoing state and federal requirements that protect air quality.

The regulation’s level of complexity is appropriate to ensure that the regulated entities are able to meet their legal mandates as efficiently and cost-effectively as possible.

As previously mentioned, the regulation embodies regulatory provisions found elsewhere in the air regulatory program; Article 14 (Sand and Gravel Processing Operations and Stone Quarrying and Processing Operations) of 9VAC5-40 via the state operating permit program and Article 5 (Environmental Protection Agency Standards of Performance for New Stationary Sources) of 9VAC5-50 via the minor NSR program.

This regulation may reduce costs for manufacturers and in most cases has a beneficial impact by lowering the permitting costs to the regulated entity. By choosing to take a minor NSR general permit over a conventional minor NSR permit, the applicant:

- is able to receive the permit faster,
- avoids the time consuming application process, and
- avoids the uncertainty associated with having to negotiate and accept a new BACT determination which may likely result in more stringent requirements than the general permit.

This regulation has not been reviewed since it was originally promulgated in 2002. In that time, it has generally become less expensive to characterize, measure, and mitigate the regulated pollutants that contribute to poor air quality. This regulation continues to provide the most efficient and cost-effective means to determine the level and impact of excess emissions and to control those excess emissions.

The department, through examination of the regulation and relevant public comments, has determined that the regulatory requirements currently minimize the economic impact of emission control regulations on small businesses and thereby minimize the impact on existing and potential Virginia employers and their ability to maintain and increase the number of jobs in the Commonwealth.

Result

Please state that the agency is recommending that the regulation should stay in effect without change.

This regulation satisfies the provisions of the law and legally binding state and federal requirements, and is effective in meeting its goals; therefore, the regulation is being retained without amendment.

Family impact

Please provide an analysis of the regulation’s impact on the institution of the family and family stability.

It is not anticipated that the proposal will have a direct impact on families. However, there will be positive indirect impacts in that the proposal will ensure that the Commonwealth's air pollution control regulations will function as effectively as possible, thus contributing to reductions in related health and welfare problems.